

Track Preference: Business and Budgeting

Presentation Title: Discovery and New Frontiers Project Budget Analysis Tool

Synopsis:

This presentation describes the Budget Analysis Tool used by the D&NF Program Office, demonstrates using the tool to forecast performance against the programs' primary requirement (launch rate), and describes how the tool could be adapted for "what-if" analyses involving other applications requiring roll-up of multiple independent budget lines.

Abstract:

The Discovery and New Frontiers (D&NF) programs are multi-project, uncoupled programs that currently comprise 13 missions in phases A through F. The ability to fly frequent science missions to explore the solar system is the primary measure of program success. The program office uses a Budget Analysis Tool to perform "what-if" analyses and compare mission scenarios to the current program budget, and rapidly forecast the programs' ability to meet their launch rate requirements. The tool allows the user to specify the total mission cost (fixed year), mission development and operations profile by phase (percent total mission cost and duration), launch vehicle, and launch date for multiple missions. The tool automatically applies inflation and rolls up the total program costs (in real year dollars) for comparison against available program budget. Thus, the tool allows the user to rapidly and easily explore a variety of launch rates and analyze the effect of changes in future mission or launch vehicle costs, the differing development profiles or operational durations of a future mission, or a replan of a current mission on the overall program budget. Because the tool also reports average monthly costs for the specified mission profile, the development or operations cost profile can easily be validate against program experience for similar missions. While specifically designed for predicting overall program budgets for programs that develop and operate multiple missions concurrently, the basic concept of the tool (rolling up multiple, independently-budget lines) could easily be adapted to other applications.